

Department of Environmental Quality

Northwest Region Portland Office 2020 SW 4th Avenue, Suite 400 Portland, OR 97201-4987 (503) 229-5263 FAX (503) 229-6945 TTY (503) 229-5471

February 25, 2000

Matt Cusma Schnitzer Steel Industries P.O. Box 10047 Portland, Oregon 97296-0047

RE: Crawford Street Corporation Site

8424 and 8524 N. Crawford Street

Portland, Oregon

Review of Preliminary Assessment

Dear Mr. Cusma:

Thank you for submitting the February 10, 2000 Preliminary Assessment (PA) of the above-referenced site. The PA addresses certain issues identified in the Department of Environmental Quality's (DEQ) October 1, 1999 Strategy Recommendation, however significant data gaps still exist. The expanded PA should include the information necessary to determine if a release of hazardous substances has occurred at the facility from current or historic operations and whether the release requires additional investigation or remedial action to assure protection of present and future public health, safety, welfare, and the environment. The DEQ has the following specific comments based on our review of the PA.

Section 2.1. Page 4. The location of the storm drain lines should be included on a site figure.

Sections 2.2.2, 2.2.3, 2.2.4, and 2.2.5. Pages 4 – 7. These sections state that various products (e.g., lubricating oils, water-based cutting oils, naphtha solvents) are used in current on-site operations. Material Safety Data Sheets for these products should be provided in the PA report and reviewed to identify contaminants of interest. The use, management, and disposal of these products should be presented. The processes in which the oils are used should be further described. Often after using these oils parts must be washed or cleaned to remove the oils. Please describe how the oils are removed and how any waste generated is managed. The management of used oil should be discussed in greater detail. For example, how long has the oil been recycled? By whom? Has a hazardous waste determination been performed?

Section 2.2.3. Page 6. What prompted the installation of filters within the catch basins?

Section 2.3. Page 8. The location of the 8-inch diameter pipe should be shown on an appropriate site figure.





- Section 2.5. Page 10. The location of the 8-inch diameter pipe should be shown on an appropriate site figure.
- Section 2.7.1. Page 10. This section suggests that subsurface investigations have occurred on the subject site. If so, a copy of the investigation report and boring logs should be submitted to DEQ or included as an attachment to the PA report.
- Section 3. Pages 12-23. This section references various Sanborn Maps. These maps should be provided in the PA or pertinent features (e.g., former maintenance shops, tanks, and mills) shown on appropriate site maps.
- Section 3. Pages 12-23. This section identifies numerous industrial uses (e.g., lumber mill, electrical generator, woolen mill, machine shop(s), foundry, plywood mill, planing mill, pattern shop, and maintenance operations) on various locations of the subject property. The main processes for each of these industrial uses should be identified and potential hazardous substances used or generated in these processes identified and screened for further evaluation.
- Section 3.1.4. Page 15. The 1988 Sweet Edwards/Emcon report should be provided to DEQ. Without documentation (e.g., analytical results, boring logs), the stated findings are not meaningful and the statements raise a lot of questions. Questions include:
 - This section states that "evidence of contamination" was not noted in groundwater. This statement raises questions about what was tested for (PAHs, VOCs, metals, PCBs?) and what the analytical detection limits were.
 - Who was the former on-site worker? Who did they work for? What period of time were they on-site?
 - What was the location of the underground storage tank? Was the release reported to DEQ? What analytical testing (TPH-HCID, solvents, metals, PCBs?) was performed to close the tank?
 - What is the extent of the black sand? What analytical testing was performed to assess contamination associated with this sand? Although the black sand is reported to be from tank cleaning, confirmation for organotins should be conducted.
 - How where test pits and soil boring locations selected?
 - Where was the former septic tank and drain field? What facility did this serve? What analytical testing was performed?
- Section 3.2.2.1. Page 17. The general maintenance operations performed in this facility should be determined. This information should be used to identify potential contaminants of interest (e.g., herbicides, petroleum products, fuels, paints, and solvents) for sampling activities.
- Section 3.4.2. Page 21. The location of the referenced test pits, hand auger borings, and soil borings should be provided on an appropriate figure. Particularly, any sampling locations located on or in the immediate vicinity of the subject property should be identified.



Section 3.5.2. Page 22. The location of the "black fill material" reported west of the subject site should be shown on an appropriate figure. Is this material believed to have been placed at the same time as the material on the subject site? Are halogenated volatile organic compounds suspected in the on-site material?

Section 3.5.2. Page 23. Pentachlorophenol was detected in groundwater on the adjacent property. Potential on-site sources of pentachlorophenol should be evaluated (e.g., black sand and historical mill operations).

Section 4. Page 24. Potential Contaminant Sources. This section does not adequately assess potential sources of contamination on the CSC site or potential contamination migration or exposure pathways. The PA should evaluate potential contaminant sources and migration pathways from both historical and current site operations; it appears that historical operations were inappropriately excluded. The specific objective of a PA is to determine if a hazardous substance(s) has been released or has the potential to released on the subject property. Potential contaminant source areas should be identified based on a review of historical site information and the results of environmental sampling, if conducted. The identification of potential source areas should include both upland and over or in water operations that may have resulted in a release of hazardous substances to soil, groundwater, surface water, and/or Willamette River sediments. Section 3 identifies numerous industrial uses (e.g., lumber mill, electrical generator, woolen mill, machine shop(s), foundry, plywood mill, planing mill, pattern shop, maintenance operations, imported fill) that may have used or generated hazardous substances. These areas and the types of contamination that could be present in each should be identified.

Section 4. Page 24. <u>Potential Migration Pathways</u>. The PA should identify and evaluate potential contaminant migration pathways (e.g., groundwater discharge; storm water discharge; direct release; volatilization, dust entrainment) and potentially affected media (e.g., groundwater, soil, Willamette River sediments, surface water) at the subject property.

Section 4. Page 24. <u>Potential Exposure Pathways</u>. The PA should identify and evaluate potential contaminant exposure pathways (e.g., ingestion, direct contact, inhalation) to humans and ecological receptors associated with the potentially affected media (e.g., groundwater, soil, Willamette River sediments, surface water) at the subject property.

Section 5. Page 28. The proposed sampling plan is not adequate to address potential concerns regarding the site. The sampling and analyses plan should be based on a conceptual site model that describes the potential sources of contamination, migration pathways, exposure routes, and contaminants of interest. The PA needs to take a broad approach of what could be present at the site, based on the specific site uses (both current and historical). The PA identifies the following potential contaminant source areas:

- Mills (planing, plywood, lumber)
- Electrical generator (transformers & capacitors?)
- Woolen mill
- Imported Fill (black sand)
- Various machine shops



- Auto repair
- Maintenance operations
- Metal forging, cleaning, machining, shaping, cutting, and painting

Potential contaminants of interest (COIs) may include, but are not limited to:

- Petroleum hydrocarbons (cutting oils, lube oils, used oil)
- Volatile Organic compounds (solvents, cleaning, degreasing, maintenance)
- Semivolatile Organic compounds(SVOCs), polycyclic aromatic hydrocarbons (PAHs)
- Metals (e.g., arsenic, copper, chromium, manganese, mercury, lead, zinc)
- Organotins
- PCBs
- Pentachlorophenol
- Herbicides

The proposed sampling plan needs to include analyses of COIs in current and historical process areas. The proposed plan assesses only potential shallow soil contamination due to storm water run off and infiltration. Both subsurface soil samples and groundwater grab samples should be collected from selected areas and screened for the COIs. Based on the extensive industrial history of the site, additional sampling is warranted to determine if a release(s) has occurred.

Section 5.3.2. Page 31. If composite sampling is proposed, the sample result must be multiplied by the number of subsamples for screening purposes. DEQ recommends that the subsamples be archived for future analyses in the event that the screening criteria are exceeded in the composite samples.

Section 5.3.4. Page 32. Following completion of the sampling activities and receipt of the analytical data, the laboratory results, photographs, boring logs, permits should be included as separate attachments to the final report.

Please address these comments and submit a revised document to DEQ by April 1, 2000. Thank you for your cooperation on this project.

Sincerely,

Tom Gainer, P.E.

Project Manager

Page 5 of 5 Crawford Street Corporation Site February 25, 2000



CC: Ross Rieke
Bridgewater Group, Inc.
4640 SW Macadam, Suite 222
Portland, Oregon 97201

Rod Struck, DEQ ECSI File #2363